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ABSTRACT

This document presents a review of literature to 1972 on institutional research. Areas of concern include definitions, purposes, functions, and origins of institutional research. Organizations contributing to institutional research and their current status are indicated. A 70-item bibliography is included. Related document is ED 071 541. (MJM)

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INSTITUTIONAL RESEARCH: A REVIEW OF LITERATURE TO 1972

by

Jack Testerman
University of Southwestern Louisiana

Robert Blackmon
Louisiana State University

John Mosier
Loyola University

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Office of
Institutional Research

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THE UNIVERSITY OF SOUTHWESTERN LOUISIANA

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Institutional Research

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Edited by

Jack D. Testerman, Director
Institutional Research

and

James R. Oliver, Dean
Graduate School

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Introduction

Despite its short existence as a recognized field of work in higher education, a respectable bibliography already exists on institutional research. This chapter summarizes the work done in the more significant areas relating to institutional research as a field or nascent discipline, discussing the reasons for its growth, how it can be defined, its purpose and function, its beginnings and development, and its current status.

The review is restrictive, although not rigorously so. The principal limitation is that highly technical studies on the problem-solving techniques used by institutional researchers are omitted, even though these may contain brief discussions of the field. Such works as the Higher Education Facilities Planning and Management Manuals, therefore, are not mentioned, even though they contain--most notably in their taxonomies--material of some interest. Again, discussions of the general area of educational study, particularly when done by workers whose major concern and field of authority is not research and planning, are largely ignored. The reason for this becomes apparent as some of the notable definitions in the literature are examined.

Although the perceptive reader has to go no further than Riesman and Jencks' classic The Academic Revolution [45] to realize the forces causing the emergence of institutional research offices throughout the nation, the works of Goodwin [23] and Brumbaugh [8] indicate that complexity resulting from the expansion of opportunities for higher education, with attendant soaring enrollments and rising costs, has caused the problems of higher education to multiply. And, as the number of persons multiply, so does the

need for information. Probably at no former time has higher education had a greater need for usable knowledge in the process of decision-making. Thus, the leaders of the academic community are turning to research for answers, and they are creating units variously known as bureaus or offices of institutional research to help them develop more and better information on which to base decisions.

Because university and college administrators and their institutions are caught up in the reverbations of the era of the "big bang"--nuclear explosions, population explosions, information explosions--those leaders have an increasingly difficult task in directing the expanding and changing institutions. The complex nature of higher education makes this so; the complexities of specialization and the rapid, unpredictable proliferation of new branches of disciplines [10:6] force the modern administrator to seek, as did Gandhi, to hurry to follow his people in order to be their leader. The literature indicates that college officers are turning to institutional research for answers in the form of data or alternatives, and often those leaders are asking that questions be identified before they become critical issues.

Because no administrator has been foolish enough to attempt to spend that much money on research, no one knows how much is too much. However, one can demonstrate that there is a relationship between the investment in research and the corporate health and development of an industry or business institution. No major corporation in America today could survive very many years if it spent as little on research as is spent, comparatively, on educational research. While the figures vary from report to report, there is an indication that the federal government is spending far less than one per cent of its annual budget on educational endeavors. Though by total second only

to defense and comprising billions of dollars in the aggregate at all levels, the individual budgets of institutions of higher education astonishingly show in comparison even smaller expenditures on the related items of research and planning.

Why attempt to justify an administrative adjunct as obviously valuable as an office of institutional research? Not nearly enough persons understand what research really is, and many of those who do have some understanding of it came by that limited knowledge through some emotionally negative and, often threatening experiences. Also, even among the relatively initiated, the distinctions between educational research, institutional research, and research in higher education are not clearly perceived.

Finally, information must be provided for those business-oriented persons who expect an office of institutional research to provide an almost immediate reduction in budget. Since the objective of education is to provide a somewhat intangible profit in quantity and quality of learning, the dollar-profit yardstick of the business world is only somewhat indirectly applicable to the academic milieu to which an office of institutional research must relate. And any businessman will concede readily that initiating a new and additional operation must require additional funding and that, in the long run, quality is a criterion often far more important than cost.

There exists a scarcity of literature on institutional research as a part of administrative organization in higher education. With the exception of some few major studies by Bagley [1], [2], [3]; Boggs and Roueche [47]; Bolman [6]; Brumbaugh [9]; Doi [13]; Fincher [18], [19]; Lins [33], [34]; McDonald [37]; Parden [43], [44]; Saupe [49], [50], [51]; Sprague [53], [54]; Stecklein [54], [55]; Stickler [58], [59], [60]; and Tyrrell [64], [65], [66]; a significant portion of the literature of institutional research can be

found within the third through the twelfth annual Proceedings of the National Institutional Research Forums, 1963-1972. (No Proceedings was published in either 1961 or 1962). Since 1964 the Association for Institutional Research has sponsored those Forums. Other invaluable guides to the literature can be found in the Association for Institutional Research annual bibliographies issued since 1966-1967. The literature also contains many studies of specific phases of institutional research and numerous self studies of institutions of higher education which include or imply institutional research. Dressel and Pratt [15] have provided an outstanding annotated bibliography in a chapter specifically directed toward institutional research. The recent volume by Dressel [14] will become a standard reference on institutional research.

Definitions of Institutional Research

The distinction between institutional research and research on higher education is elusive, but it does seem certain that the former is the foundation for the latter; i.e., research on higher education is a more comprehensive concept than is institutional research [15:ix].

Institutional research tends to focus on studies which usually are specific to the problems of a particular institution or to systems of institutions of higher education. Because institutions may well have many problems in common and because any institutional study may need and collect data from elsewhere in order to relate the local situation to the overall pattern of education in institutions of higher education, institutional research inquiries may add to understanding higher education broadly as well as illuminating the facets of particular institutions. To put it another way, according to Trow's classification of research, institutional research is often predictive or directive while research on higher education is most often illuminative.

According to Wiersma [68:274], institutional research is "self study by a college, designed to improve the institution." Hirsch [27] goes further by stating that "Anything which is now or could be a problem or an issue for the institution concerned is the legitimate province of institutional research which is, therefore, a type of applied research to perform a service to the institution."

Institutional research, according to Garner [22], can be defined also as a centrally coordinated program of self study within an institution, designed to systematically collect, analyze, evaluate and interpret variegated forms of information as it is related to any pertinent aspect of the university's operation, or its components, in order to provide the data base from which the institution may make more efficient, effective, and educationally sound use of its resources to fulfill its avowed purposes.

Thus, institutional research is research about a particular institution of higher learning by those within the institution for the express purpose of aiding in the administration of the institution. It is in a very real sense a device in the administrator's tool kit. It refers, please note, to all who have a role in the administration of the institution, and that includes a significant involvement of faculty. That is, administration in relation to institutional research can include the foregoing expansion of definition as well as referring to the specialist who devotes full time to the management of one or more programs of the institution.

As Grout [24:5] points out, institutional research differs from scholarly research. It can only be justified if it aids the institution and those who are responsible for its operation. Administrative research is often spoken of as comparable to institutional research but is actually a more comprehensive term, according to Hendrix [26:67], and may actually

utilize institutional research (making studies, gathering data, etc.) as a basis for arriving at decisions. Administrative research can be seen then as a process involving the continuing use of a particular conceptual framework as a basis for arriving at decisions. That framework consists of the application of scientific methods to the process of defining objectives, assembling relevant data, and utilizing these in arriving at decisions which affect the achievement of the objectives.

Fuller [21:77] takes a classification of type of studies approach to defining institutional research: "... the search for intimate knowledge of all elements which make up an institution of higher education--students, faculty, curriculum, facilities and finances which may then be used to assist the administration in making decisions that affect the institutions."

Kirks [32:35] quotes John Dale Russell as saying that institutional research is "an agency . . . attached directly to . . . the office of the president or vice president; it is assigned specific responsibility for carrying on studies needed for the making of important decisions about policy and procedures; and it works toward the primary goal of finding out how to save money that can be used to better advantage."

Dressel and Pratt [15:x] state that the nature of institutional research is suggested by the following four points:

> Institutional research is the accumulation, analysis, and interpretation of data relevant to decisions about and use of institutional research.
>
> Institutional research, through studies, focuses attention on problems to indicate their complexity and to suggest the possible effects of various solutions.
>
> Institutional research is a staff function serving all units of a university, currying the favor of none and occasionally irritating all.

> Institutional research is most effective when its efforts lead to rational, factually based solutions to university problems without itself being obviously involved in the ultimate solutions.

One of the more perceptive writers [56] on institutional research defines it in terms of an organizational unit maintained by the university for study of its own educational and administrative problems. It is a fact-finding organization. It seeks only to discover through scientific inquiries the answers to problems that arise in the work of a great university.

Hugh Stickler [58:542] seems to have summed up the various approaches and definitions into what has come to be regarded as a classic statement:

> Institutional research refers to research which is directed toward providing data useful or necessary in the making of intelligent administrative decisions and/or for the successful maintenance, operation, and/or improvement of a given institution of higher education. It includes the collection of and analysis of data used in appraising the environment or "setting" in which the institution operates, in preparing the budget, in planning new buildings, in assigning space in existing buildings, in determining faculty loads, in admitting students, in individualizing instruction, in planning the educational program, and the like. It is needed to facilitate efficient operation, but is also needed to promote qualitative improvements.

Purposes for Institutional Research

At the 1970 National Forum on Institutional Research, Nangle [42:50] asked:

> We are still in the midst of a process of evolution with respect to the definition of our role--or is it roles? Our own identification with the profession requires us to come to grips with this question: Am I an in-house consultant, a scientist whose primary concern is doing "research," a provider and storehouse of information, a member of the management team who helps make decisions and shape policy? Which do I do and in what proportions?

In the monumental study, Institutional Research in the West, Sprague [53:7] identified the purpose of institutional research as the

development of factual bases on which decisions might be made. Very often, he pointed out, the research is conducted so that plans for growth can be laid with knowledge of what the college or university is like before growth occurs and so that some of the consequences of the plans can be anticipated. Thus, the major purpose of the institutional research unit is to improve the institution and its mission. Therefore, one of the major purposes of institutional research is its improvement of the institutional process.

When the institutional researcher has successfully met the issue of what a university ought to be, then he can begin to illuminate two other major areas: managerial efficiency and instructional effectiveness, for Bolman [5:15] says it well when he asserts that "Sound governance and good learning are what make a good university."

Joe Saupe [49:1] in "Memo to a Newcomer," said:

> In the words of the purposes of the Association for Institutional Research, institutional research is intended to improve the understanding, planning, and operation of institutions of higher education. More specifically, institutional research furnishes data, information, and analytic studies required for informed decision-making in colleges and universities.

Mason [35:7] listed the following concerns of institutional research: strengthening rational planning, improving educational process, developing more effective resource allocation systems, building better information bases, and restructuring the patterns of governance in the institutions. Those concerns have not all been covered in the three major purposes of institutional research reported by Huff [29:189]:

> 1) to comply with standard, recurring information requests from external state and national agencies as well as to provide a standard array of data for those within the institution.

2) fill special information requests from president and faculty.

3) furnish information which will be helpful in long-range planning.

In Democracy's College, Diekhoff [12:193] gives the purposes of a program of institutional research as identification of those activities of the college in which improvement is most-needed; the invention or discovery of means to improve them; the stimulation of faculty interest in educational problems; the increase of the concern of faculty members for continuous improvement of the educational programs and for improvement in their own services.

Tyndall [63:32] makes a distinction between the comparison of institutional research and operations research, as follows:

> I think of institutional research within a university as something akin to operations research in a large business enterprise. Operations research was done in business long before offices of operations research were set up, and likewise institutional research was done in higher education long before offices of institutional research were established. But now that we have been institutionalized, we want to find our proper role and place in the administrative hierarchy. The purpose of operations research has been stated in Methods of Operations Research as "providing executive departments with the quantitative basis for decisions regarding the operations under their control."
>
> Does not institutional research have the same purpose in the educational institution? Offices of operations research, too, are fumbling for their proper role, from pure research at one extreme to involvement in day-to-day line operations at the other. I think that we will have something to learn from them in this regard, and perhaps they from us. However one thing seems clear: They have found that a central part of their role lies in the implementation of the plans which they develop for consideration by management, not that they substitute themselves for the operating management, but that it is essential that they interpret the plan and that they assist in the detailed development, including the evaluation and control aspects (which will presumably be discussed in

tomorrow's sessions). I believe that this is equally true for institutional research.

In regard to the institutional research purpose of self study, Stecklein [57:10] suggests that it:

1) Provides continuity of self-examination.

2) Must collect, collate, and synthesize facts, information and attitudes that will include both faculty and administration, ideas, and points of view, serves as a major point of intersection of faculty concerns and administration's concerns.

3) Provides basic data and information to be used as a basis for judgment by administration.

4) Works with faculty in evaluating existing programs and functions and experimenting with new techniques that might be used to improve the educational program, in terms of either quality or efficiency, but preferably in terms of both.

Thus, as so well stated by Lins [33], conceptions of purpose vary:

> Through institutional research, whether as a function of a specific office or whether resulting from separate reports of various offices, problems facing institutions of higher learning are brought to light and bases for decisions provided. The need for evaluation may be as diverse as the purposes for which institutions are operated. Thus the conception of what institutional research encompasses may vary from one college or university to another.

The organization of offices of institutional research to cope with information needs (demands) generally has a profound effect upon their purposes and how they function. Rourke and Brooks [48:14] clearly document this. One institutional researcher may see himself as a right-hand man to the president. Another may operate independently and frequently undertake studies not requested by anyone.

Boyer [7:18] urges institutional researchers to become agents of change. Others suggest that the proper role is to recommend change on the

basis of findings. Still others think that research results should speak for themselves. Some institutional researchers become directly involved in planning while others flatly contend they do not run a planning or policy formation office. Rourke and Brooks [48], Saupe [49], [51], and Montgomery [40] all offer good discussions of the varying concepts of institutional research.

But Hall [30:26] quotes Herman B. Wells to assert with unusual rhetoric an important side effect of the purposes of institutional research:

> The Mission of Institutional Research is to turn yesterday's fact into today's doubt and tomorrow's myth . . . This is a time when yesterday's bright new fact becomes today's doubt and tomorrow's myth. A University must do more than just stand guard over the nation's heritage; it must illuminate the present and help shape the future.

Functions of Institutional Research

Although the functions of an office of institutional research in an institution of higher education should proceed from the statement of purposes for that office, sometimes it does not happen that way because functions were assumed prior to the development of stated purposes. Even at best, it is often quite difficult to separate purposes from functions. Consequently, this section on functions will tend to overlap the previous section on purposes.

The dominating function of the bureau or office of institutional research is to put the policies and practices of its sponsoring institution under the scrutiny of objective research techniques, including the conduct of a continuous appraisal of its educational operations [20:1156]. Wedekind says in the Eleventh AIR Proceedings (1971) that institutional research is a staff rather than a decision-making function and, as such, provides the data on which to base decisions; that it should play a role in evaluation of

line operations in carrying out policy; and, that it should serve the faculty as well as the administration. Henderson [25:216] stresses objectivity in the functions of collection of data and in the collection of samples of opinion necessary to the activities noted above. Among the functions cited by Ikenberry [31:9] are an attempt to define issues or problems, the responsibility to devise tools to gather information, the processing of the information once it has been gathered, and the dissemination or conveyance of the substance of the message in the findings. Kirks [32:34] believes that:

> By determining and analyzing developing trends in societal needs, institutional research can be instrumental in assisting the university to take adaptive measures to more successfully accomplish its objectives in a changing environment.

Another way of summarizing the functions of the office would be: 1) stimulation and facilitation of cooperative staff planning, 2) assistance to staff members in their research efforts, 3) collection and cataloging of research reports and dissemination of findings, 4) establishment of a research reference library, 5) assistance in data gathering, 6) provision of information needed in decision making, and 7) liaison between the college and the community [38].

Morgan [41:67] felt that the function of the institutional researcher and planner would be to inform and advise those parties within the college charged with making institutional decisions of the consequences of their decisions so that they would know the full impact of what they do, not only in immediate terms (which they seem to prefer) but also in terms of the total (political, economic, social, etc.) fabric of the institution and primarily in its relationship to long-range institutional objectives or philosophy.

The functions noted above indicate an oft-repeated concept related to the functions of the office of institutional research: it is to serve all segments of the university population rather than existing as an administrative adjunct alone. Thus, it would appear that one of the functions of the office is to secure the involvement of all the persons in the institution--those who are responsible for its governance. [57:12].

The functions noted above clearly indicate that long-range planning and self study are within the domain of institutional research. Mason [36:29] stated that the office of institutional research should be equipped to assume a coordinating staff role in comprehensive planning. As the focal point of institution-wide data collection and equipped with skills in the methods of research and analysis, institutional research should build, presumably, a solid foundation of information for and understanding of the relationship between programs and resources.

Frances Horn [28:1], a university president, cites the research findings of Brumbaugh to support essentially the same value as those of Mason presented above.

Although a long quotation, the summarization of the proper role of institutional research in the general areas of institutional policy by Carl Wedekind [67:31] is comprehensive:

> What is the proper role of institutional research in the general areas of institutional policy? I submit the following:
>
> The role of institutional research in formulation of policy is essentially an advisory function. The institutional research functions should be placed at the highest possible level of institutional management to minimize administrative filtration. However, it is this top-level location for an effective role in policy formulation that makes policy implementation difficult to avoid. The office of institutional research has the

responsibility to obtain data of all sorts (including conferences, opinions, and reactions from all sources and levels), to collate them in an orderly and meaningful way, to interpret them, to point out their significance for effective institutional operation, to highlight those aspects which have significance for policy, and to suggest a course or alternate courses for action where it is appropriate and necessary. This is the staff function. It is not a decision-making function. Although institutional research may clearly point up or even recommend a particular method of implementation, the decision must be made by top management. Actual policy implementation, however, is basically a line function and should be carried out and directed by the operating unit. Industry found this out long ago.

Secondly, institutional research should play a major role in the evaluation of existing policy within an institution. This involves not only an evaluation of the particular policy in the light of institutional objectives, but includes as well the evaluation of the effectiveness of the line operations in carrying out these policies. If institutional research is to play a role in both the formulation and evaluation of policy, it should not be involved in the implementation process. If this were the case, it would be difficult for the research man to maintain an unbiased and objective frame of reference for evaluating a system for which he may also have had the responsibility of implementation. In short, implementation and evaluation within the same agency seem to be a contradiction in fact. Were it not so, I suspect many consulting firms and accreditation bodies would have long ceased to exist.

Institutional research is a staff function. It is not executive or line, and as such, ideally should not make or carry out policy decisions. To the extent that an institutional research office does get involved in the implementation process, it becomes less capable and effective in carrying out the evaluative functions. Also, it is more likely to operate under some other aegis than institutional research, such as administrative, academic, or institutional planning. As a viable entity an institutional research unit can be involved in the formulation and implementation process or the formulation and evaluation process, but not all three.

> This leads into another major role which the institutional research office can play, a role that has often been stressed by many of those involved in institutional research. (This role was particularly well expressed by Dr. Stecklein at the 1961 American Council on Education meetings in Washington, D. C.) Basically the point is this: the role of an institutional research office should be to serve the faculty as well as the administration of the institution, and this service should be in a direct as well as indirect manner.

Origin of Institutional Research

The relatively obscure but venerable roots of institutional research in higher education in the United States seem, according to W. H. Cowley [11], to have begun developing as early as 1701 when Mather, then President of Harvard University, acted as an educational consultant to the founders of Yale.

Probably the first Bureau of Institutional Research, as such, was established at Stephens College in Missouri in 1921. Other pioneer bureaus included the University of Minnesota (1923) and the University of Illinois (1933). However, those roots were neither deep nor numerous within higher education in America until the post-World War II era provided both sudden increases in student population and foundation funds for institutional studies. Stecklein [54:249] stated that in 1957 there were "only a handful of units in higher educational institutions in the country whose primary function was institutional research or special institutional studies." By 1962 Stecklein could list over 50 such units or individuals. Sprague, Stickler, Rourke and Brooks, and Doi indicate that most of the institutional research units have emerged since 1960. Roney [46] found in 1970 in a survey of Association of Institutional Research members that the mean length of existence of the respondents' offices of institutional research was less than five years.

Contributing Organizations

For several years prior to 1961, institutional research groups had met during the annual National Conference on Higher Education sponsored by the Association for Higher Education. In 1961 the annual National Institutional Research Forums began, and they continued under the title of Annual Forum on Institutional Research of the Association for Institutional Research when the group organized in 1964 as the Association for Institutional Research. The papers read at those forums and presented in the annual reports probably constitute the richest source of information concerning institutional research organizations and activities.

Various studies and conferences have been sponsored for altruistic and commercial reasons, such as those supported or sponsored by the W. K. Kellogg Foundation, the Carnegie Corporation, the Southern Regional Education Board [11:i], the American Council on Higher Education, the Western Interstate Commission for Higher Education, Educational Testing Service, and various universities. [49:5-11].

Other interested organizations have included the American Association of Land Grant Colleges and State Universities Association, the American Association of Junior Colleges, the Southern College Personnel Association, the ERIC Clearinghouse of Studies on Higher Education. The ERIC Clearinghouse on Educational Administration at the University of Oregon is now processing documents related to some areas of institutional research in higher education.

It should be noted here that the list above is not presented as an exhaustive one. The various scholarly organizations devoted to a particular discipline, the specific associations for research such as the American Educational Research Association, the professional organizations

such as Phi Delta Kappa, and the various organizations for educational institutions and for their administrative officers are all concerned from time to time with institutional research as it impinges upon their fields. Finally, although several of the units were referred to above, a number of programs and offices of the federal government gather and disseminate data of interest to persons concerned with institutional research.

Current Status

Directors and offices of institutional research are entities in search of definition and identity in the institutions of higher learning in the United States today. They vary in organization from a do-it-yourself activity by interested professors or registrars, through decentralized organizations involving part-time research coordinators in various administrative departments or academic disciplines, through a well-staffed and well-organized bureau or office of institutional research serving as both the routine data collection and dissemination unit and the group responsible, to the chief administrative officer(s) for alternative solutions to anticipated problems. The trend seems to be toward a judicious combination of the organized research bureau in a centralized form with active involvement of research committees from the various disciplines and the employment of individual faculty members on a released-time basis for the pursuit of research problems identified by them but of an institutional research nature. Thus, it would be fair to say that institutional research is in a state of flux but becoming more organized and better funded.

The studies of the immediate past tend to run heavily toward the routine collection and dissemination of data and to the conventional curriculum, instructional, faculty, administrative, and student personnel types of studies. The offices have tended to be so busy and so underfunded and

understaffed that they have not been able to find either the time or the financial persuasions to influence or provide more creative research programs. Probably this situation has been perpetuated somewhat because there has not been a generally recognized set of criteria for selection of the director of institutional research; consequently, the post has been filled sometimes by circumstances of politics or personalities or status positions rather than on qualifications. Very likely the foregoing selection factors could inhibit the movement of the office of institutional research toward the new directions that now loom as possible on the horizon. Upgrading of the personnel presently in some offices of institutional research and of some faculty members will be necessary through in-service educational programs; in many cases, the status quo is not adequate to the possible future.

Current relations between the chief administrators to whom the director of institutional research reports and the director vary from little or no communication and understanding on the part of the chief executive to little or no ability to serve on the part of the director. The ideal situation is rare in which data collection and dissemination are routinely handled while the director and his staff also concentrate on evaluation and the development of innovations or on anticipating pre-researchable problems and providing alternative solutions that have been paradigm-tested.

Only a few offices of institutional research have tapped the reservoirs of talent inherent in the faculty through the use of faculty research advisory committees from the various disciplines (with the chairmen of those committees sitting on the advisory committee for institutional research). The writers know of no office of institutional research which has a special committee (other than self-study) charged with the responsibility of evaluating the activities and performance of the office of institutional

research.

As the financial squeeze becomes tighter, institutional research offices are feeling the need to explain, interpret, and justify their existence. Because of lack of production or because of lack-luster performance, some offices of institutional research will be eliminated. In some instances, administrators are toying with a return--despite the apparent trend of the past few years--to decentralization of institutional research and data collection and dissemination. A few far-sighted administrators are aware of the financial gains to be had from spending on institutional research, and they are expanding and upgrading their offices of institutional research precisely because those offices have been and are providing them with data which permits them to make decisions for more effective use and allocation of resources.

Summary

If the review has strongly implied a growing recognition of the need for institutional research offices--a recognition accompanied by the rapid growth of such offices themselves--all other observations regarding it seem ambiguous. This much seems clear: institutional research comes from the rapid expansion of higher education, which has produced complexity and sheer bulk that forces the specialization and centralization of all those agencies having decision-making powers.

The attempts that have been made to define the field reveal that all of the definers have agreed that institutional research is aimed at and involved with the making of decisions. All of the definitions have this in common, and they differ from one another chiefly at those points where they separate institutional research from other areas, such as general educational research or academic research. Even then, the definers generally agree that

institutional research differs from these fields in specificity and location: it concentrates on particular problems generally related closely to the institution being studied; and, in marked contrast to educational research, the work is done by a well-defined agency.

Not surprisingly, then, there is some consensus on the purpose of institutional research offices. They aid in the decision-making process by providing factual bases for those making decisions, and those decisions usually are aimed at establishing the efficiency of marginal operations in the institution and the efficiency of its instructional processes. Although all writers agree that institutional research is decision-oriented, not all would go so far as some and argue that institutional research is to the university as operations research is to business or industry. There are some, as noted earlier, who feel that the institutional researcher should act as a catalyst in the university system, getting people to focus their energies and attentions on common problems; this, surely, is a crucial difference between institutional and operations research.

The insistence that institutional research officers contribute to the decision-making process through the collection and dissemination of data makes the question of the formal functions of the office subject to considerable discussion. In general, it is felt that the institutional research officer is strictly a staff officer, whose advice and assistance are freely given, and should be asked for, but who does not actually make decisions. As is frequently pointed out, such a distinction means that personnel involved with long-range planning or self studies are also staff officers whose duties are subsumed by institutional research. This is an area in which much work remains to be done. The classical distinctions of the business world, in which the importance of the separation of the functions of line or production

managers and staff personnel is of paramount importance, may possibly be imperfectly analogous to the world of higher education.

When one considers that the average institutional research office is roughly five years old, these problems become much more understandable. This is a new field, although one with rapid growth, as our discussion of the proliferation of professional organizations as well as institutional agencies suggests. It is therefore equally unsurprising that the status of institutional researchers in the university is far from clearly understood or exercised. There is a wide variance of the roles such officers play, ranging from isolated staff officers in the sense of business to researchers who formally or informally have line functions, to those men whose authority in the system not only makes them planners but also to people who have the right to overturn the decisions of others when their schemes of implementation clash with the plans worked up by the researcher. Just as research officers run the gamut from registrar's personnel who fill in reports, to vice presidents in charge of analysis or planning, so do the conceptions of the details of the offices themselves. Perhaps the most amazing thing about this review is the large amount of consensus that it has detected.

BIBLIOGRAPHY

1. Bagley, Clarence H. (ed.). A Conceptual Framework for Institutional Research. Proceedings of the Fourth Annual National Institutional Research Forum. Pullman, Washington: Office of Institutional Research, Washington State University, 1964.

2. _____. Design and Methodology in Institutional Research. Proceedings of the Fifth Annual National Institutional Research Forum. Pullman, Washington: Office of Institutional Research, Washington State University, 1965. 21 p. See also Educational Resources Information Center Microfiche Nos. ED 034 472 or ED 044 785.

3. _____. Research on Academic Input. Proceedings of the Sixth Annual National Institutional Research Forum. Cortland, New York: Office of Institutional Planning, State University of New York, 1966. See also Educational Resources Information Center Microfiche No. ED 044 786.

4. Berdahl, Robert O. Statewide Coordination of Higher Education, Washington, D. C.: American Council on Education, 1971.

5. Bolman, Frederick de W., "Needed Research in Administration of Higher Education," Educational Record 46: 166-176; No. 2 (1965).

6. _____, "University Reform and Institutional Research," in Cameron Fincher (ed.), The Challenge and Response of Institutional Research. Proceedings of the Ninth Annual National Institutional Research Forum. Athens, Georgia: Institute of Higher Education, University of Georgia, 1970. 177 p. See also Educational Resources Information Center Microfiche No. ED 048 654.

7. Boyer, Ernest L. The Impact of Institutional Research on the Academic Program. Albany: Office of the Vice Chancellor for University-Wide Activities, State University of New York, 1969.

8. Brumbaugh, A. J. Summary and Prospects: Institute on Institutional Research. Tallahassee, Florida: Southern Regional Educational Board, 1960.

9. _____, "Institutional Research: A Basis for Planning with Special Reference to the Large Public University," pp. 15-24 in L. Joseph Lins (ed.), The Role of Institutional Research in Planning. Proceedings of the Third Annual National Institutional Research Forum. Madison, Wisconsin: Office of Institutional Studies, The University of Wisconsin, 1963.

10. Cavanaugh, Alfred D., "Institutional Research and the Development of Financial Policies," a paper delivered at the Eleventh Annual Forum of the Association for Institutional Research, Denver, Colorado, May, 1971.

11. Cowley, W. H., "Two and a Half Centuries of Institutional Research," pp. 1-16 in Richard G. Axt and Hall T. Sprague (eds.), College Self Study: Lectures on Institutional Research. Boulder, Colorado: The Western Interstate Commission on Higher Education, 1960.

12. Diekhoff, John S. Democracy's College: Higher Education in the Local Community. New York: Harper & Brothers, 1950.

13. Doi, James I., J. Kenneth Little, and John E. Stecklein, "Institutional Research at the Universities of Colorado, Wisconsin, and Minnesota," pp. 23-36 in Richard G. Axt and Hall T. Sprague (eds.), College Self Study: Lectures on Institutional Research. Boulder, Colorado: The Western Interstate Commission on Higher Education, 1960.

14. Dressel, Paul L. Institutional Research in the University: A Handbook. San Francisco: Jossey-Bass, Inc., September, 1971.

15. Dressel, Paul L., and Sally B. Pratt. The World of Higher Education: An Annotated Guide to the Major Literature. San Francisco: Jossey-Bass, Inc., 1971.

16. Dwyer, Francis M., Jr. An Experiment in Visual Communication. University Park: University Division of Instructional Services, Pennsylvania State University, 1968.

17. Fincher, Cameron (ed.). The Challenge and Response of Institutional Research. Proceedings of the Ninth Annual National Institutional Research Forum. Athens: Institute of Higher Education, University of Georgia, 1970. 177 p. See also Educational Resources Information Center Microfiche No. ED 048 654.

18. _____. The Challenge and Response of Institutional Research. Proceedings of the Ninth Annual National Institutional Research Forum. Athens, Georgia: Institute of Higher Education, University of Georgia, 1970. 177 p. See also Educational Resources Information Center Microfiche No. ED 048 654.

19. _____. Institutional Research and Academic Outcomes. Proceedings of the Eighth Annual National Institutional Research Forum. Athens, Georgia: Institute of Higher Education, University of Georgia, 1968. 245 p. See also Educational Resources Information Center Microfiche No. ED 029 557.

20. Froehlich, Gustav J., "Research Bureau," pp. 1155a-1160b in Chester W. Harris (ed.), Encyclopedia of Educational Research, Third Edition. New York: The Macmillan Company, 1960.

21. Fuller, William, "Intra-Institutional Planning," pp. 77-80 in Clarence H. Bagley (ed.), Research on Academic Input. Proceedings of the Sixth Annual National Institutional Research Forum. Cortland: Office of Institutional Planning, State University of New York, 1966.

11. Cowley, W. H., "Two and a Half Centuries of Institutional Research," pp. 1-16 in Richard G. Axt and Hall T. Sprague (eds.), College Self Study: Lectures on Institutional Research. Boulder, Colorado: The Western Interstate Commission on Higher Education, 1960.

12. Diekhoff, John S. Democracy's College: Higher Education in the Local Community. New York: Harper & Brothers, 1950.

13. Doi, James I., J. Kenneth Little, and John E. Stecklein, "Institutional Research at the Universities of Colorado, Wisconsin, and Minnesota," pp. 23-36 in Richard G. Axt and Hall T. Sprague (eds.), College Self Study: Lectures on Institutional Research. Boulder, Colorado: The Western Interstate Commission on Higher Education, 1960.

14. Dressel, Paul L. Institutional Research in the University: A Handbook. San Francisco: Jossey-Bass, Inc., September, 1971.

15. Dressel, Paul L., and Sally B. Pratt. The World of Higher Education: An Annotated Guide to the Major Literature. San Francisco: Jossey-Bass, Inc., 1971.

16. Dwyer, Francis M., Jr. An Experiment in Visual Communication. University Park: University Division of Instructional Services, Pennsylvania State University, 1968.

17. Fincher, Cameron (ed.). The Challenge and Response of Institutional Research. Proceedings of the Ninth Annual National Institutional Research Forum. Athens: Institute of Higher Education, University of Georgia, 1970. 177 p. See also Educational Resources Information Center Microfiche No. ED 048 654.

18. _____. The Challenge and Response of Institutional Research. Proceedings of the Ninth Annual National Institutional Research Forum. Athens, Georgia: Institute of Higher Education, University of Georgia, 1970. 177 p. See also Educational Resources Information Center Microfiche No. ED 048 654.

19. _____. Institutional Research and Academic Outcomes. Proceedings of the Eighth Annual National Institutional Research Forum. Athens, Georgia: Institute of Higher Education, University of Georgia, 1968. 245 p. See also Educational Resources Information Center Microfiche No. ED 029 557.

20. Froehlich, Gustav J., "Research Bureau," pp. 1155a-1160b in Chester W. Harris (ed.), Encyclopedia of Educational Research, Third Edition. New York: The Macmillan Company, 1960.

21. Fuller, William, "Intra-Institutional Planning," pp. 77-80 in Clarence H. Bagley (ed.), Research on Academic Input. Proceedings of the Sixth Annual National Institutional Research Forum. Cortland: Office of Institutional Planning, State University of New York, 1966.

22. Garner, William Harold. A Systematic Approach to the Establishment of an Office of Institutional Research in a Small University. Unpublished doctoral dissertation, Michigan State University, 1970.

23. Goodwin, Dorothy C., "Work Load Assignments," Handbook of College and University Administration. New York: McGraw-Hill Book Co., Inc., 1970.

24. Grout, Stuart, "A Conceptual Framework for Institutional Research: Three Points of View," pp. 5-6 in Clarence H. Bagley (ed.), A Conceptual Framework for Institutional Research. Pullman: Office of Institutional Research, Washington State University, 1964.

25. Henderson, Algo D. The Innovative Spirit. San Francisco: Jossey-Bass, 1970.

26. Hendrix, Vernon L., "Junior College Environment Scales," pp. 61-72 in Cameron Fincher (ed.), Institutional Research and Academic Outcomes. Proceedings of the Eighth Annual Institutional Research Forum. Athens: Institute of Higher Education, University of Georgia, 1968.

27. Hirsch, Peter M. Institutional Research and the Community College. St. Louis: St. Louis Junior College District, September 1966. See also Educational Resources Information Center Microfiche No. ED 016 451.

28. Horn, Francis H., "A University President Looks at Institutional Research," pp. 1-14 in L. Joseph Lines (ed.), The Role of Institutional Research in Planning. Proceedings of the Third Annual National Institutional Research Forum. Madison: Office of Institutional Studies, The University of Wisconsin, 1963.

29. Huff, Robert A., "MIS Development: Implications for Institutional Researchers," p. 189 in Patricia S. Wright (ed.), Institutional Research and Communication in Higher Education. Proceedings of the Tenth Annual National Institutional Research Forum. Berkeley: Office of Institutional Research, University of California, 1970.

30. Hull, L. E., "Fact, Doubt, and Myth," pp. 1-6 in Cameron Fincher (ed.), Institutional Research and Academic Outcomes. Proceedings of the Eighth Annual Institutional Research Forum. Athens: Institute of Higher Education, University of Georgia, 1968.

31. Ikenberry, Stanley, "Institutional Research in the Professional Organization: Implications for Communication," pp. 9-11 in Patricia S. Wright (ed.), Institutional Research and Communication in Higher Education. Proceedings of the Tenth Annual National Institutional Research Forum. Berkeley: Office of Institutional Research, University of California, 1970.

32. Kirks, Jerry L., "Organizational Effectiveness and Institutional Research," pp. 31-38 in Cameron Fincher (ed.), Institutional Research and

Academic Outcomes. Proceedings of the Eighth Annual Institutional Research Forum. Athens: Institute of Higher Education, University of Georiga, 1968.

33. Lins, L. J. (ed.). Basis for Decision (Current Institutional Research Methods and Reports for Colleges and Universities). Madison: Dembar Educational Research Services, Inc., 1963.

34. _____. The Role of Institutional Research in Planning. Proceedings of the Third Annual National Institutional Research Forum. Madison, Wisconsin: Office of Institutional Studies, University of Wisconsin, 1963. See also Educational Resources Information Center Microfiche No. ED 016 367.

35. Mason, Thomas R., "Communication in Institutional Research: The Purpose of the Association - Presidential Address," pp. 7-8 in Patricia S. Wright (ed.), Institutional Research and Communication in Higher Education. Proceedings of the Tenth Annual National Institutional Research Forum. Berkeley: Office of Institutional Research, University of California, 1970.

36. _____, "The Role of Institutional Research in Decision Making," pp. 29-40 in Galen N. Drewry (ed.), The Instructional Process and Institutional Research. Proceedings of the Seventh Annual National Association for Institutional Research Forum. Cortland: Office of Institutional Planning, State University of New York, 1967.

37. McDonald, Douglas. A Study of the Informational Needs and the Development of a Proposed Form Manual for Use in Preparing Recurring Reports in the Office of Institutional Research at the University of Mississippi. Unpublished doctoral dissertation, University of Mississippi, 1965.

38. Michaels, Joseph. Guidelines for the Establishment of an Office of Institutional Research and Development at Pasadena City College. Los Angeles: California University, 1966. See also Educational Resources Information Center Microfiche No. ED 014 275.

39. Montgomery, James R., "An Effective Role for Institutional Research," pp. 140-142 in Patricia S. Wright (ed.), Institutional Research and Communication in Higher Education. Proceedings of the Tenth Annual National Institutional Research Forum. Berkeley: Office of Institutional Research, University of California, 1970.

40. _____, "The Role of Institutional Research in the Evaluation of Policy," pp. 43-49 in Clarence H. Bagley (ed.), A Conceptual Framework for Institutional Research. Pullman: Office of Institutional Research, Washington State University, 1964.

41. Morgan, Marston, "Research and Planning Versus the Crisis-Response Approach to Administrative Problem Solving," pp. 67-69 in Patricia S. Wright (ed.), Institutional Research and Communication in Higher

Education. Proceedings of the Tenth Annual National Institutional Research Forum. Berkeley: Office of Institutional Research, University of California, 1970.

42. Nangle, John E., "Comments on Institutional Research: What Role in Administrative Decision Making?" pp. 49-50 in Patricia S. Wright (ed.), Institutional Research and Communication in Higher Education. Proceedings of the Tenth Annual National Institutional Research Forum. Berkeley: Office of Institutional Research, University of California, 1970.

43. Parden, Robert J. An Expanded Role for Institutional Research. Santa Clara, California: Office of Institutional Planning, University of Santa Clara, 1971.

44. _____, "An Expanded Role for Institutional Research," a paper delivered at the Eleventh Annual Forum of the Association for Institutional Research, Denver, Colorado, May, 1971.

45. Riesmann, David and Christopher Jencks. The Academic Revolution, Garden City, New York: Double Day and Company, 1968.

46. Roney, Robert. Evaluation of the University of Tennessee Housing, June 1969. Knoxville: Office of Institutional Research, The University of Tennessee, 1969.

47. Roueche, John E., and John R. Boggs. Junior College Institutional Research: The State of the Art. Washington, D. C.: American Association of Junior Colleges, 1968. 76 p. See also Educational Resources Information Center Microfiche No. ED 021 557.

48. Rourke, Francis E., and Glenn E. Brooks, "The Growth of Institutional Research," pp. 44-67 in The Managerial Revolution in Higher Education. Baltimore: The John Hopkins Press, 1966.

49. Saupe, Joe L. Memo to a Newcomer to the Field of Institutional Research. Athens, Georgia: Association for Institutional Research, 1967.

50. _____, "Assessing Program Quality," pp. 1-12 in Cameron Fincher (ed.), The Challenge and Response of Institutional Research. Proceedings of the Ninth Institutional Research Forum. Athens, Georgia: Institute of Higher Education, University of Georgia, 1970.

51. Saupe, Joe L., and James R. Montgomery. The Nature and Role of Institutional Research . . . Memo to a College or University. Berkeley: Office of Institutional Research, University of California, November 1970. See also Educational Resources Information Center Microfiche No. ED 049 672.

52. Smith, Keith, "New Techniques in Institutional Research," pp. 91-92 in Clarence H. Bagley (ed.), A Conceptual Framework for Institutional Research. Pullman: Office of Institutional Research, Washington

State University, 1964.

53. Sprague, Hall T. (ed.), Institutional Research in the West. Boulder, Colorado: Western Interstate Commission for Higher Education, 1959.

54. Stecklein, John E., "Institutional Research: Current Status and Further Requirements," pp. 249-252 in Current Issues in Higher Education, 1962. Washington, D. C.: Association for Higher Education, National Education Association, 1962.

55. _____, "Institutional Research," pp. 4-123 through 4-135 in Asa Knowles (ed.), Handbook of College and University Administration. Two Volumes, New York: McGraw Hill, [c. 1970].

56. _____, "Research Done for the Faculty," pp. 89-100 in Richard G. Axt and Hall T. Sprague (eds.), College Self Study: Lectures on Institutional Research. Boulder, Colorado: The Western Interstate Commission on Higher Education, 1960.

57. _____, "The Birth of a Profession," pp. 9-14 in Clarence H. Bagley (ed.), Research on Academic Input. Proceedings of the Sixth Annual National Institutional Research Forum. Cortland: Office of Institutional Planning, State University of New York, 1966.

58. Stickler, W. Hugh. Institutional Research Concerning Land-Grant Institutions and State Universities. Tallahassee: Office of Institutional Research and Service, Florida State University, 1959.

59. _____, "The Role of Institutional Research in 'The Managerial Revolution in Higher Education': an Overview," pp. 1-15 in E. F. Schietinger (ed.), Introductory Papers on Institutional Research. Atlanta: Southern Regional Education Board, 1968.

60. _____, "The Expanding Role of Institutional Research in American Junior Colleges," Junior College Journal 31: 542-548; No. 9 (May 1961).

61. Suslow, Sidney. A Declaration on Institutional Research. Association for Institutional Research, 1972.

62. Tincher, Wilbur A. A Study of the Members of the Association for Institutional Research. Berkeley: Association for Institutional Research, 1970.

63. Tyndall, D. Gordon, "The Role of Institutional Research in the Implementation of Policy," pp. 29-32 in Clarence H. Bagley (ed.), A Conceptual Framework for Institutional Research. Pullman: Office of Institutional Research, Washington State University, 1964.

64. Tyrrell, Philip H., "Notes on Experimental Projects and Institutional Research," Journal of Higher Education 40: 443-450; No. 6 (June 1969).

65. _____, "Programming the Unknown, Guidelines for the Conduct of Institutional Research," The Journal of Experimental Education 31: 92-94; No. 2 (December 1962).

66. _____, "Programming the Unknown, Guidelines for the Conduct of Institutional Research, in L. J. Lins (ed.), Basis for Decision. Madison, Wisconsin: Dembar Educational Research Services, Inc., 1963. (Also see: ERIC Microfiche ED 018 104.)

67. Wedekind, Carl E., "The Role of Institutional Research in the Implementation of Policy," pp. 33-35 in Clarence H. Bagley (ed.), A Conceptual Framework for Institutional Research. Pullman: Office of Institutional Research, Washington State University, 1964.

68. Wiersma, William, "A New Approach to Institutional Research," Education 89: 274-278; No. 3 (February-March 1969).

69. Wilson, Kenneth M. (ed.). Institutional Research on College Students. Papers presented at the Swannanoa Conference sponsored by the Southern College Personnel Association, the Southern Regional Education Board, and the Carnegie Corporation. Swannanoa, North Carolina: Warren Wilson College, 1962.

70. Wright, Patricia S. Wright (ed.). Institutional Research and Communication in Higher Education. Proceedings of the Tenth Annual National Institutional Research Forum. Berkeley: Office of Institutional Research, University of California, 1970. See also Educational Resources Information Center Microfiche No. ED 046 093.